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Date Printed:	Released: 07/02/2003 Rev. Num: 6.0
Approved By: Rear Admiral Nicholas A. Prah, NOAA	

MOC ATLANTIC HURRICANE EMERGENCY PLAN

1. Purpose and Scope

PURPOSE

These procedures provide a hurricane emergency plan for the MOC Atlantic to minimize injuries and property damage from severe storms and hurricanes, and to maintain compliance with the Hampton Roads Maritime Hurricane Contingency Plan promulgated by the United States Coast Guard Captain of the Port (COTP).

Historical data from the National Weather Service show that a hurricane or severe storm in the Norfolk area, although a rare occurrence, may subject the MOC Atlantic to winds in excess of 60 knots and a storm surge of up to 17 feet above normal water levels. Under these conditions, the parking lots and ground floor spaces of the buildings would be flooded with consequential water damage to affected equipment and furnishings. Also likely is damage by high winds and water to equipment stored outside and possible damage to ships and dockside facilities by wave pounding.

Under the provisions of Title 33, Code of Federal Regulations, Parts 160 and 165, the COTP has been authorized to establish a safety zone encompassing all waterfront facilities, marinas, and vessels within navigable waters along the coast and within the State of Virginia, and the Outer Banks region of North Carolina south to and including Ocracoke Island. Within this prescribed safety zone, the COTP is authorized to direct the handling, loading, unloading, storage and movement of dangerous cargoes aboard waterfront facilities and the anchoring, berthage and movement of vessels.

SCOPE

It is the collective responsibility of all MOC Atlantic and tenant personnel to prepare for the onslaught of a hurricane; to protect government buildings, property, equipment, and records, etc.; and to provide for the welfare and safety of employees. Once all hurricane preparations at MOC Atlantic have been completed, all shore-based employees will be dismissed to attend to the safety of their own homes and families. Employees should consult the hurricane preparedness document published by the Hampton Roads Emergency Management Committee which is available either on-line at <http://www.hremc.org/hurricane.htm> or in hardcopy format from OPS.

This plan will be in effect during hurricane season (June 1 through November 1), each year, until superseded.



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Purpose and Scope (Continued)

2. Definitions

No definitions are required for this procedure.

3. Responsibilities

EMP	Employee
OPS	Operations Division
SUP	Supervisor
FM	Facility Manager
CO, DIR MOC & OPS	Commanding Officer/Master, Director, Marine Operations Center and Operations Division
EXT	External
DIR MOC & FM	Director, Marine Operations Center and Facility Manager
EED, FM & SUP	Electronic Engineering Division, Facility Manager and Supervisors
CO	Commanding Officer/Master
FM & OPS	Facility Manager and Operations Division
CO & OPS	Commanding Officer/Master and Operations Division

4. Procedures

- 4.1 EMP Hurricane Categories**
The following are classifications of hurricanes based on the Saffir Simpson Scale.
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Category 1 – Minimal

Central Pressure: greater than 980 mb or 28.94 in.

Winds: 74 to 95 mph or 64 to 83 kts

Surge: 4 to 5 feet

Damage: primarily restricted to shrubbery, trees, and unanchored mobile homes; no substantial damage to other structures; some damage to poorly constructed signs; low lying roads inundated; minor damage to piers; small craft in exposed anchorages torn from moorings.

Category 2 – Moderate

Central Pressure: 965 to 979 mb or 28.50 to 28.91 in.

Winds: 96 to 110 mph or 84 to 96 kts

Surge: 6 to 8 feet

Damage: considerable damage to shrubbery and tree foliage, some trees blown down; major damage to exposed mobile homes; extensive damage to poorly constructed signs and some damage to windows, doors and roofing materials of buildings, but no major destruction to buildings; coastal roads and low lying escape routes inland cut off by rising water about 2 to 4 hours before landfall; considerable damage to piers and marinas flooded; small craft in protected anchorage torn from moorings; evacuation of some shoreline residences and low lying areas required.

Category 3 – Extensive

Central Pressure: 945 to 964 mb or 27.91 to 28.47 in.

Winds: 111 to 130 mph or 97 to 113 kts

Surge: 9 to 12 feet

Damage: foliage torn from trees; large trees blown down; poorly constructed signs blown down; some damage to roofing,



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windows, and doors; some structural damage to small buildings; mobile homes destroyed. Serious flooding along the coast; many small structures near the coast destroyed; larger coastal structures damaged by battering waves and floating debris; low lying escape routes inland cut off by rising water about 3 to 5 hours before landfall; flat terrain 5 feet or less above sea level flooded up to 8 or more miles inland evacuation of low lying residences within several blocks of shoreline may be required.

Category 4 – Extreme

Central Pressure: 920 to 944 mb or 27.17 to 27.88 in

Winds: 131 to 155 mph or 114 to 135 kts

Surge: 13 to 18 feet

Damage: shrubs, trees, and all signs blown down; extensive damage to roofs, windows, and doors, with complete failure of roofs on many smaller residences; mobile homes demolished; flat terrain 10 feet or less above sea level flooded inland as far as 6 miles; flooding and battering by waves and floating debris cause major damage to lower floors of structures near the shore; low lying escape routes inland cut off by rising water about 3 to 5 hours before landfall; major erosion of beaches; massive evacuation of all residences within 500 yards of the shore may be required, as well as of single story residences in low ground within 2 miles of the shore.

Category 5 – Catastrophic

Central Pressure: less than 920 mb or 27.17 in

Winds: greater than 155 mph or 135 kts

Surge: greater than 18 feet

Damage: trees, shrubs, and all signs blown down; considerable damage to roofs of buildings, with very severe and extensive damage to windows and doors; complete failure of many roofs of residences and industrial buildings; extensive shattering of glass; complete buildings destroyed; small buildings overturned



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or blown away; mobile homes demolished; major damage to lower floors of all structures less than 15 feet above sea level within 1500 feet of the shore; low lying escape routes inland cut off by rising water about 3 to 5 hours before landfall; major erosion of beaches massive evacuation of residential areas on low ground within 5 to 10 miles of the shore may be required.

4.2 OPS

Weather Forecasts

OPS will be the focal point for weather forecasts and Notice to Mariners' broadcasts, maintaining communications with vessels and liaison with the United States Coast Guard, Navy, and National Hurricane Center. OPS will routinely monitor and plot the location, projected track, speed of advance and maximum sustained wind speed of tropical depressions, storms, and hurricanes and will keep Director, MOC informed concerning the potential threat to MOC ships and facilities. OPS will maintain communication with the COTP, as necessary, to ensure compliance with the Hampton Roads Maritime Contingency Plan, to advise COTP concerning the status of MOC vessels, and to obtain up-to-date information concerning hurricane anchorage availability.

4.3 SUP

Coordinating Activities

Supervisors are responsible for coordinating the activities of personnel within their respective areas of control, coordinating movement of critical equipment and documents, and directing appropriate actions to secure work areas.

4.4 FM

Emergency Locker

The Facility Manager (FM) will stock and maintain an emergency locker for hurricane or other emergency preparedness. By May 1 of each year, all items in the locker will be inventoried and restocked as necessary. All non-expendable items will be labeled "Emergency Locker." Keys to the locker will be



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distributed to Director, MOC, FM, OPS, and the base guard.
The emergency locker shall contain:

1/4" rope (1 box)
Batteries (renew yearly - 2 doz)
Containers (1 gal each)
Crescent wrenches (2)
Duct tape (20 rolls)
First aid kits (3)
Flashlights (12)
Hammers (4)
Ladders (2)*
Measuring tapes (3)
Mops and pails
Nails (2 boxes)
Plastic bags
Plastic rolls
Pliers (4)
Saws (4)
Screw drivers (4)
Shovels (3)
Strapping tape (10m)



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*ladders kept in outside area

4.5 CO, DIR MOC & OPS

Ship Anchorage

Each active ship will be responsible for its own security, either alongside MOC Atlantic or at a designated anchorage nearby. The decision to remain alongside MOC Atlantic or to proceed to a designated anchorage will be made by Director, MOC, after consultation with the vessel's CO and the COTP. Designated hurricane anchorages may not be available to NOAA ships. OPS will advise commands as to the availability of anchorages and of hurricane condition status. Inactive vessels and vessels not fully staffed which are berthed at the MOC Atlantic will be unnested if pier space is available.

4.6 EXT

Non-NOAA vessels

All non-NOAA vessels berthed at the MOC will be the responsibility of the owner, not the MOC. The Director, MOC and the FM will determine the necessary actions to unnest active and inactive vessels berthed at MOC Atlantic. At a minimum, all mooring lines will be doubled.

4.7 EMP

Preparation for Hurricane

All Employees are expected to perform duties as assigned to them by their supervisor in preparation for the arrival of a hurricane.

Condition 4: Hurricane force winds are expected within 72 hours.

Condition 3: Winds of hurricane force are expected within 48 hours. Condition 3 is equivalent to "Maritime Hurricane Condition



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XRAY" and to a civilian "Hurricane Watch."

Condition 2: Winds of hurricane force are expected within 24 hours. Condition 2 is equivalent to "Maritime Hurricane Condition YANKEE" and to a civilian "Hurricane Watch."

Condition 1: Winds of hurricane force are expected within 12 hours. Condition 1 is equivalent to "Maritime Hurricane Condition ZULU" and to a civilian "Hurricane Warning." The MOC will be evacuated; no one will remain during the hurricane. Security guards will be dismissed, securing the gate on departure, only after everyone is confirmed to be off MOA property. This is consistent with NOAA's recommendation that all people in low lying areas evacuate to high ground.

4.8 OPS

Preparation for Hurricane

Condition 4:

OPS, MOC determines the availability of hurricane anchorages from the U.S. Coast Guard COTP and advises Director, MOC.

Condition 3:

1) Advise the COTP of all vessels permitted to remain alongside and the mooring arrangements to be used.

2) Notifies all MOC Atlantic vessels, deployed and alongside, that MOC activities may be secured until further notice within the next 24 hours.

4.9 DIR MOC & FM

Preparation for Hurricane

Condition 4:

Director, MOC determines which vessels are to remain alongside, which are to proceed to designated hurricane



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anchorage, and which are to be sortied.

Director, MOC and the FM take necessary actions to unnest active and inactive vessels berthed at MOC Atlantic and moor them as prescribed in Appendix 1 to Annex A of COTP-Hampton Roads Maritime Hurricane Contingency Plan. At a minimum, all mooring lines will be doubled. Anchor chain and/or wire rope will be used to secure vessels to hurricane bollards if deemed necessary.

Condition 3:

Director, MOC

- 1) Establishes a recall procedure for all employees.
- 2) Informs COs of active ships concerning his decision to permit vessels to remain alongside. Those vessels directed to a hurricane anchorage will be notified by OPS of an anchorage assignment prior to the end of Condition 3.
- 3) Notifies MOC Pacific and OMAO that MOC Atlantic activities may be secured until further notice within the next 24 hours.

FM

- 1) Removes survey launches and small boats from berths alongside and secures them on trailers in front of Building 1.
- 2) Moves warehoused documents and equipment to higher levels if necessary.

4.10 EED, FM & SUP

Preparation for Hurricane

Condition 4:

All supervisors review MOC Atlantic Hurricane Emergency Plan and discuss with their personnel.



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Condition 3:

EED will tests emergency generator and prepare in case of extended power loss.

Condition 2:

EED will initiate orderly shutdown of IT equipment, transfer e-mail server, and shutdown ferrups, when deemed appropriate by the Director, MOC. Refer to EED 05, FERRUPS ORDERLY SHUTDOWN, and EED 06, TRANSFER OF E-MAIL SERVICE.

FM will direct MOA employees if assistance is needed to secure the building in preparation of the hurricane. FM will also utilize the assistance of the Security Guards to help move and secure equipment, as needed.

All supervisors

- 1) Obtain supplies as necessary and inform or assign personnel responsible for moving and securing equipment and spaces.
- 2) Supervise safekeeping/moving of records, data, equipment, etc., to upper levels.
- 3) Cover equipment to protect from rain damage.
- 4) Move equipment away from windows.
- 5) Place desk items in drawers.
- 6) Move computers, typewriters, and electronics to the center of rooms and cover/wrap with plastic and tape.

Condition 1:

EED and FM secure power to Buildings 1 and 2 and to



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unoccupied vessel berths. Secure antennae as required.

4.11 OPS

Tenant Preparation

Operations Division will advise and assists tenants if possible, but tenants are responsible for securing their own equipment. All tenants will be evacuated at the same time as employees and will not be allowed to remain in the building, if evacuation is ordered by the Director, MOC.

4.12 EED, FM & SUP

Weekend Preparation for Hurricane

If the hurricane is projected to make landfall affecting the MOA over a weekend, or holiday, preparations will be made prior to leaving Friday, or the closest previous business day. The Director, MOC and the Chief, EED will determine if and when to initiate shutdown of IT equipment and transfer of e-mail services.

4.13 EMP

Hurricane Safety and Survival

The Hampton Roads Emergency Management Committee (HREMC) has prepared emergency and evacuation information at: <http://www.hremc.org/index.htm>. Employees are encouraged to read and follow the HREMC recommendations in order to safeguard their families and prepare their homes and property for the onslaught of the hurricane.

4.14 CO

Post-Hurricane Procedures

As soon as practicable following passage of the storm, all COs will report the status of their personnel and equipment to OPS, MOC.

4.15 FM & OPS

Damage Assessment

The Damage Assessment Team, consisting of OPS and FM, will:



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- 1) Solicit damage reports from all Divisions, Sections, and Staffs.
- 2) Evaluate all damage.
- 3) Recommend priorities and use of resources to Director, MOC.

The recommendation to the Director, MOC will address the following:

- clearing emergency access
 - utilities restoration (especially potable water)
 - drying facilities
 - debris removal
 - priorities (damage assessment and immediate fixes)
 - leave policy for Center staff
 - contract help
 - interim communication network
 - timetable and estimate when MOC-Atlantic will be in full operation
- 4) Supervise the return to normal status.

4.16 CO & OPS

Emergency Contacts

Hurricane Emergency Contacts and Telephone Numbers, area code (757);

Port Operations, Naval Base Norfolk.....444-7118

Little Creek Harbor Master.....462-7395

Little Creek Port Services.....462-7791

USCG COTP (recorded message).....(800) 682-1796,



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Option 2, then Option 3

(VHF-FM Ch. 81)

5th Coast Guard District Operations Center..398-6000 Option 3

Coast Guard Group Hampton Roads.....483-8567

(VHF-FM Ch. 16, 83)

USCG MSO Duty Officer.....484-8192

USCG Port Safety and Security.....441-3298

5. References

5.1 Related Procedures

WORKING HOURS DURING EMERGENCIES ADM 11

5.2 Reference Documents

FERRUPS ORDERLY SHUTDOWN EED 05

Hampton Roads Maritime Hurricane Contingency Plan

<http://www.hremc.org>

HURRICANE HAVENS HANDBOOK FOR THE NORTH HH NA
ATLANTIC OCEAN

TRANSFER OF E-MAIL SERVICE EED 06

6. Records

No records are created by this procedure.



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7. Policy References

This procedure has no policy references.

8. Notes

Effective Date: This procedure is effective upon receipt

Distribution Media:

Distribution: OMAO, MOC, NOAA Ships, EASC, WASC

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